

Knowledge gaps and strategies to address them

7

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Chapter 7

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Executive summary

The relationship between environmental change, conflict, and migration — referred to as the environment-migration-conflict nexus — is complex, nonlinear, and lacks direct causality. While the link between conflict and migration has a wide empirical basis in the Mediterranean (and beyond), there is less clarity regarding climate change's impact on the initiation of conflict. State capacity, socio-economic development, and foreign meddling or intervention are generally recognised as the primary drivers of conflict and migration in the Mediterranean Basin, while climate change is recognised as a 'threat multiplier'.

The relationship between environmental change and security is best understood in terms of the climate's disproportionate impact on human security (and its relationship with the environment, i.e. planetary security). This framing can assist in providing more holistic understandings of the nexus, while not losing track of pre-existing challenges derived from non-climatic variables (i.e. politics, governance, and social contracts) which also have a bearing on the incidence of conflict and migration.

Multidisciplinary approaches to the environment-conflict-migration nexus are therefore best placed to capture the complexity of the phenomena, addressing climatic and non-climatic variables relevant to conflict and migration, as well as the related capabilities of states and societies to implement mitigation and adaptation mechanisms.

The breadth and diversity of variables (political, economic, social, cultural, environmental, security-related, etc.) evolving under the influence of globalisation and digitalisation across the Mediterranean Basin, together with the broad timeframe needed to test the inter-relationships, create methodological complexity in addressing the environment-conflict-migration nexus in the Mediterranean Basin.

The legacy of Western colonialism, foreign interventionism, and geopolitical divides across Mediterranean Basin states impede region-wide policy approaches or genuine multilateralism on each dimension of the environment-conflict-migration nexus. Ultimately, any recognition of a linkage between environmental change and security should also acknowledge the destabilising legacy of foreign interventionism, as well as the impact of lifestyles in the Global North (increasingly also exported to some localities of the Mediterranean Basin) and thereby contain a dimension of burden-sharing and climate justice.

Securitised approaches to the climate emergency can raise awareness and resources but also risk distracting from pre-existing non-climate variables linked to governance and the social contract. Such approaches to climate change are in large part a by-product of a broader securitisation⁸⁰ trend in developmental literature, which followed the terrorist attacks of 11 September 2001. In a similar fashion, the current emphasis on the climate-migration nexus is at least partially driven by securitised policy priorities in Europe and the Global North to externalise migration flows across the Mediterranean. Such prioritisation risks skewing policy priorities and would benefit from a broader emphasis on global climate justice in order to better tackle the asymmetries across Mediterranean Basin states and neighbouring regions.

Future scenarios linked to accelerated climatic disruptions may well provide more direct correlations for the environment-conflict nexus in the Mediterranean, with repercussions likely to extend to migratory flows. This serves as the underlying rationale for much of the analysis contained in this report.

⁸⁰ The concept of 'securitisation' is used in this Analysis as defined in international relations and political science, particularly within the framework of the Copenhagen School (Buzan et al. 1998). Securitisation refers to the process through which an issue is constructed as an immediate and existential threat by a powerful actor—such as a government or political leader—through a speech act. This construction must be accepted by a relevant audience to legitimise the use of extraordinary measures beyond normal political procedures. As used in this Analysis, securitisation concerns the construction of issues as security threats, not the financial meaning of the term (i.e. the pooling and repackaging of assets into tradable securities). See Chapter 6, Section 6.2.

7.1 Introduction

The environment-conflict-migration nexus is complex and multidimensional. Scholarly literature has generally challenged the existence of a direct causal relationship between environmental change, migration, and/or conflict, the latter term covering both inter-state and intra-state conflict, including domains such as resource scarcity, socio-economic instability, repression, civil war, or revolution. While this complex relational understanding is widely accepted by academia, which generally points to governance and political variables as having a greater bearing on the outbreak of conflict or mass migration waves, a similar degree of nuance is absent in government policy, military strategy, and contingency planning. Within these circles, the securitised framing of climate change as a 'threat multiplier' with significant implications for national and international security is generally accepted. Such readings emphasise the indirect and cascading impact that climate change and environmental degradation can have on a wide range of socio-economic, political and governance fragilities, which in turn can lead to conflict and/or mass migration — while recognising that the mechanisms, methodologies, and policy implications related to such a nexus are still subject to debate.

The previous chapters have demonstrated the absence of a clear causal relationship by which environmental change directly and necessarily leads to conflict and migration. This chapter will critically engage with several 'pathways' outlined by the literature through which climate change, in conjunction with other pre-existing variables, is presumed to fuel mass migration and conflict, particularly over scarce resources such as water, food, or land. Such reflection underscores the need for a wider analytical prism that also accounts for non-climatic variables of a governance and political nature, which are recognised as having a greater correlation with conflict and migration, when seeking analytical clarity and policy responses to the environment-conflict-migration nexus in the Mediterranean Basin.

Moving to methodological issues in research and policy development, the breadth of variables and the long timeframe required to test the interlinkages between environment, conflict, and migration represent significant conceptual challenges. The

broad diversity of Mediterranean Basin states, with their different political systems, capabilities, and developmental levels — as well as varying degrees of exposure to, and prioritisation of the threats of environmental change — further complicates data collection and the development of region-wide policy prescriptions. The presence of frozen and active conflicts and broader geopolitical tensions in multiple localities of the Mediterranean or in regions directly bordering Mediterranean Basin states (i.e. the Sahel; the Horn of Africa; the Persian Gulf), also represents a challenge. Such fault lines and fragilities, combined with a history of colonial exploitation and asymmetric North-South relations, weaken joint ownership and highlight the fragmentation of the region. This, in turn, complicates efforts to adequately address the transnational threats of environmental change and their possible correlation with conflict and migration in a region-wide framework. Ongoing geopolitical divisions between and among northern, southern, and eastern Mediterranean Basin states — also accentuated by the prevalence of North-South power asymmetries, revived great power competition, and more general grievances tied to the different degrees of responsibility for past polluting activities — create further complexity and fragmentation. Considering these methodological challenges, emphasis will be placed on multidisciplinary and the need to widen the temporal scope of data collection to account for the broad diversity of Mediterranean Basin states and societies. Acknowledging how future scenarios may well demonstrate a greater degree of correlation due to suddenly worsening environmental conditions represents another important methodological consideration, pointing to the need for continued vigilance and data collection looking to the short and medium term.

Ultimately, the chapter will propose constructive rethinking of prevalent conceptual frameworks applied to the environment-migration-conflict nexus. A reframing of the nexus to underscore its direct and detrimental impact on human security (and planetary security) as opposed to the prevalent emphasis placed on hard security (i.e. intra- or inter-state armed conflict, terrorism, smuggling, etc.) will be proposed. Overcoming fragmented policy approaches, breaking down policy silos, and enhancing integrated 'whole society' approaches that mirror the objectives of the UN's Agenda 2030 is part and parcel of a less securitised approach to the environment-conflict-migration nexus in



the Mediterranean Basin. Such an approach can leverage improvements across multiple social, political, and institutional domains to enhance preparedness to face climatic events, and possible correlations with conflict and migratory waves. Reflections of this kind are important to improve the way in which environmental change is framed as a 'threat multiplier', while at the same time reminding decision-makers that such readings should also account for the destabilising impact that lifestyles and consumption models in the Global North have had (and are still having) on the initiation of climate change.

Finally, the analysis will underscore how current securitisation trends in international approaches to climate change, and the environment-migration-conflict nexus, are part of a broader process of turning climate into a security issue (securitisation) in developmental studies underway since the terrorist attacks of 11 September 2001. While

this framing may carry some benefits in terms of awareness and budgetary commitments, a more inclusive focus that encompasses other frameworks prioritising good governance, human rights, and legitimate social contracts would enhance the resilience of Mediterranean states and societies to better face the environmental emergency and its complex, multidimensional relationship with conflict and migration flows.

A focus on human security can also help in identifying alternative pathways to enhance joint ownership, as well as capabilities to implement needed adaptation and mitigation strategies. Such a focus should build on local traditions and experiences inherited from ancestral practices that are today still part of ecological and sustainable development approaches in certain localities of the Mediterranean (e.g. Algeria, Morocco, Tunisia, and Libya, as well as further afield in Iran).

7.2 Mechanisms and pathways affecting the environment-migration-conflict nexus

Since the 1972 UN Conference on Human Environment in Stockholm⁸¹, policy, media, and scholarly discussions have raised warnings about the possible connections between climate change and security dynamics, including most notably conflict and migration. Such warnings have increasingly gained international recognition in the wake of the terrorist acts of 11 September 2001, due in part to the initiative of the US military establishment and the British government under Tony Blair's New Labour (Brown et al. 2007; Crawford 2022). In 2009, both a UN General Assembly resolution (63/281) and a UN Secretary General report (A/64/350) highlighted the 'possible security implications' of climate change (UN General Assembly 2009; UN Secretary-General 2009). The last decade has witnessed a proliferation of UN Security Council open debates and country-specific resolutions on climate and security (Cusato 2022). While very few of these resolutions target countries in the (extended) Mediterranean, the recognition that the Mediterranean Basin is a climate change hotspot raises concerns about the possible security implications on regional security (*Chapter 1, Section 1.1.3; Chapter 3, Section 3.2.1*).

Many studies have investigated whether, how, and to what extent changing climate factors are causally linked to (in)security dynamics, including instability and conflict, as well as migration flows. Remarkably, the large majority of these studies find that evidence of such a causal link — whether deterministic, probabilistic, or other — is tenuous at best, often contradictory, and largely inconclusive (Homer-Dixon 1994 1999; Gleditsch 1998; Nordås and Gleditsch 2007; Salehyan 2008; Buhaug 2010; Benjaminsen et al. 2012; Theisen et al. 2013; Selby 2014; Buhaug et al. 2015; Mach et al. 2019). In fact, today there is a substantial scientific consensus that the claim that climate change is a direct cause of conflicts is unsubstantiated (see *Chapter 4*). This does not imply a sceptical view on the reality of climate change. While there is overwhelming evidence for the evolution of geophysical trends and its expected disruptions, their impact on human societies is far more difficult to predict (Hulme 2011).

Building on these findings, the presentation of the connection between climate change and conflict in terms of a causal relationship has largely been dropped. Instead, reports and declarations from the international community (including CNA Military Advisory Board 2007; UN Secretary-General 2009; IPCC 2014; G7 2015; US DoD 2019; NATO 2021) have increasingly framed climate change as a 'threat multiplier', having an impact (whose magnitude remains to be determined) on pre-existing social, political, and security fragilities. Subsequent analyses have therefore focused less on extrapolating alleged causal linkages between climate variables and security outcomes, and more on the search for 'pathways' capable of articulating heterogeneous dimensions — climate, environment, governance, and security — in a more flexible and holistic manner. Recent reports by prominent international organisations (e.g. Rüttinger et al. 2015; Mobjörk et al. 2020; UN DPPA 2020) have put forward several such pathways. From this perspective, climate change is seen as having the potential to affect security by exacerbating, for instance, livelihood deterioration and resource competition; mobility, migration and, transhumance; food price volatility and/or food shortages; transboundary water management challenges; and social grievances.

While these pathways highlight different drivers of insecurity, most of them appear to allude to a common argument, that environmental security scholars have dubbed the 'scarcity' mechanism (*Chapter 3, Section 3.3.4*). According to this view, worsening climatic conditions (often compounded by other environmental stressors, such as demographic growth and/or unsustainable livelihoods) contribute to the progressive depletion of valuable natural resources on which livelihoods depend (*Chapter 5, Section 5.3.1*). Increasing resource scarcity exacerbates competition, which could escalate and lead to violent conflict. Variants of the same argument include the 'greed' mechanism, whereby the declining supply of natural resources is not seen as a survival threat, but as an economic opportunity, because the inelastic demand of basic consumption goods pushes prices upward. Conflict may then result from the hoarding of resources driven by greedy (violent) entrepreneurs; as well

⁸¹ <https://www.un.org/en/conferences/environment/stockholm1972>

as the ‘migration’ mechanism, whereby climate change-induced scarcity of resources — whether the result of incremental depletion or of sudden disruptions caused by ‘natural’ disasters — prompts enhanced human mobility. This, in turn, may intensify frictions and heighten tensions between indigenous/host communities and displaced/migrant groups (see *Chapter 4*). On the ground, the empirical manifestations of these mechanisms may vary. In temporal terms, the impact of ‘scarcity’ and ‘migration’ mechanisms may be seen in the long term, while the ‘greed’ mechanism is more closely linked to short-term price variations of basic commodities. On the spatial scale, conflicts would tend to cluster where resources are less abundant according to the ‘scarcity’ mechanism, and more abundant according to the ‘migration’ mechanism.

While all these mechanisms may appear reasonable, numerous studies have highlighted their manifold shortcomings, which contribute to questioning the explanatory value of the overall scarcity argument and its variants.

Firstly, at a conceptual level, scarcity tends to be so vaguely defined that it loses most of its meaning (Fairhead 2001). Scholars have stressed that ‘scarcity’ cannot possibly refer to an objectively small quantum of resources, because it is an inherently relational concept. Therefore, scarcity is less the outcome of the supply-demand (in)balance than of the rise of new ideologies, policies, or political and economic structures, which result in the resources in question being deemed more valuable and conflict-worthy than hitherto (Selby and Hoffmann 2014). The recognition that environmental scarcity is in fact endogenous to social relations and social meanings suggests a need to shift from attributing conflict outcomes to exogenous, ‘natural’ factors, towards considering the role of policies and decision-making processes that actively contribute to shaping scarcity in pursuit of specific objectives (Verhoeven 2011; Mehta et al. 2019).

Second, the scarcity mechanism demonstrates a very poor predictive capacity. The concern that

scarcity of water and soil depletion would trigger conflicts, especially in drylands such as North Africa and the Middle East, has been present for three decades (Gleick 1993; Homer-Dixon 1994) — or even since Malthus, as has been argued. This contention continues to be reiterated in influential policy (UNEP 2007) and scholarly (Welzer 2012) works warning about imminent ‘climate wars’. Such dire predictions, though, have generally not been borne out by empirical evidence. Accurate empirical research suggests that water scarcity does not appear to be a significant conflict driver (Gleditsch et al. 2007), and that peaceful settlements largely prevail over violent escalations whenever conflicts over competitive uses of scarce natural resources do occur, whether for water (Stucki 2005), or fertile lands sought by farmers and herders (Moritz 2010). As stated in previous chapters, there is no evidence of active or past conflicts being driven by water scarcity in the Middle East and North Africa (MENA)⁸² region and the wider Mediterranean Basin. While political tensions have increased over the management of transboundary water resources (e.g. among Egypt, Sudan, and Ethiopia over the Nile River; Türkiye with Iraq and Syria; Iran and Iraq; and between Israel, Jordan, and Palestine), none of these tensions have (yet) escalated into outright conflict. Much of the same applies to other resources — most notably hydrocarbons. Oil did play a role in heightening tensions between Saudi Arabia and Iran (prior to the 1979 Iranian Revolution) and was among the causes of the Iraqi invasion of Kuwait in the First Gulf War, but cannot be described as the determining variable for conflict in the region.

Having failed to accurately predict the outbreak of conflict, the scarcity mechanism and/or its variants have been increasingly used to provide ex post explanations of violent conflicts that did occur. Remarkably, some of the most important conflicts linked to changes of environmental dynamics have taken place in the Mediterranean region and neighbouring countries, including the civil war in Syria since 2011, the conflict in Darfur in 2003, and the ongoing conflict in the Sahel. In these cases, however, comprehensive multidisciplinary studies

⁸² Although this Analysis focuses primarily on the Mediterranean region, it also draws on data from the Mediterranean Basin, the Eastern Mediterranean and Middle East (EMME), and the broader Middle East and North Africa (MENA) region (also referred to as Southern and Eastern Mediterranean Countries). In this Analysis, the MENA region refers specifically to countries bordering or closely connected to the Mediterranean Sea.

have disputed that climate change, and the scarcity mechanism provide convincing explanations for the onset and evolution of such conflicts (see *Chapter 4, Section 4.1*). In the case of Darfur, while UN reports have lent some credit to scarcity-based explanations of the conflict (UNEP 2007), subsequent studies have demonstrated that the war did in fact break out while Darfur experienced above average rainfall, and the aggregate food output (and export) in Sudan was increasing (Verhoeven 2011; Selby and Hoffmann 2014). This narrative thus contributes to misrepresenting the fundamental political and economic drivers of the crisis in Darfur, and to concealing how ‘environmental scarcity’ was in fact socially engineered. Lastly, the semi-arid region of the Sahel, at the southern edge of the extended Mediterranean space, is often viewed as the quintessential case of a scarcity-induced conflict exacerbated by climate change. Nevertheless, empirical studies have found no convincing correlation between climate and conflict events in the Sahel (Hissler 2010; Benjaminsen et al. 2012). Other studies question the responsibility of climate change in the phenomena of desertification (Behnke and Mortimore 2016) and food crisis (ICG 2020; Cold-Ravnkilde and Ba 2022) that are claimed to be behind many conflicts in the Sahel.

A further strand of academic research has recently focused on the possibility that, in times of climate and environmental emergency, natural resources could be weaponised as a warfare strategy. Several well-known events have been reported, especially in the Middle East and Africa, associated with the violent conflicts in Syria and Iraq, and the disputes that occurred in the Nile River area between Egypt, Sudan, and Ethiopia. The statistical probability of the weaponisation of natural resources materialising as an integral practice in conflict dynamics is significantly increased in contexts where the natural resource is directly affected by environmental change. Much attention has been paid, in particular, to the case of water and its strategic military role that seems to go back to the era of the ancient Mesopotamians. It has been highlighted that water, as a renewable natural resource, presents a complex scenario. It is subject not only to risks from mismanagement and overuse by communities but also to physical impacts

from climate change, which together put pressure on its availability and usability (Gleditsch et al. 2007; Daoudy 2020; Kohler 2020; MedECC 2020; IPCC 2022). Water scarcity may create conditions where state and non-state actors can instrumentalise and exploit such natural resources as an offensive but also defensive capability. The tactic is deployed not only through military weaponisation, but very often political weaponisation plays a relevant role for state and non-state groups to establish political leverage and reinforce their legitimacy with local vulnerable populations. Moreover, there have been cases of water apartheid under water scarcity conditions, considered a direct abuse of human rights. The case of Nigeria, Somalia, Sudan, Syria, alongside the Lake Chad Basin region, are well-established examples in the literature, further underscored by Niger’s recent decision to join the UN Water Convention⁸³, a crucial transboundary water-sharing agreement. Nevertheless, the literature highlights how resource access could affect conflict dynamics but also shows that it can offer means for cooperation, especially on water scarcity mechanisms (Koubi et al. 2014; Vesco et al. 2020; Feuer 2023). Cooperation over natural resources does not indicate that there is an absolute absence of conflict, but it at least demonstrates that there is a willingness and openness to address water or natural resources scarcity and abundance challenges through positive dynamics, in the future as well (King 2023; see also *Chapter 4*).

Building on the ‘migration’ mechanism, environmental stress is often presented as a possible driver of migration, with climate change-induced resource scarcity or localised (relational) abundance providing respective push and pull factors for increased human mobility. This view appeared to prevail in early policy reports (Hinnawi 1985; Jacobson 1988), sometimes with alarmist tones, and surfaced in the First Assessment Report of the IPCC Working Group II on Impacts, Adaptation and Vulnerability (IPCC 1990). Noting the debate’s lack of scientific rigour (Piguet et al. 2011), however, subsequent IPCC Reports have adopted an increasingly sceptical stance regarding bold claims connecting climate change and migration (see also (Klepp 2017). Research has progressively recognised the complexity and interactions of the

⁸³ <https://unece.org/environment-policy/water/about-the-convention/introduction>

various drivers of migration with environmental factors, which makes it difficult to identify climate change as a direct determinant of mobility choices (Cattaneo et al. 2019; Kuhnt 2019). In most cases, environmental change is more likely to have an indirect, non-linear effect on migration dynamics, which could both increase the incentives to leave, while simultaneously limiting the capacity to do so (Black et al. 2011), thereby 'trapping' impoverished people in impoverished environments (Foresight: Migration and Global Environmental Change 2011). Taking stock of a decade of research, a recent report therefore concludes that 'most people moving due to climate change and other environmental factors tend to move within their country and, if they cross borders, tend to stay within regions. Warnings of mass transcontinental migration are unsubstantiated' (Mixed Migration Centre 2022) (see also *Chapter 5, Section 5.3.1*). Environmental change also appears to have a limited impact on the attractiveness of the migrant smuggling business. The analysis of migrant smuggling dynamics from Sub-Saharan to North Africa suggests that 'most smugglers were attracted to the smuggling industry, not out of desperation to escape desertification and resource scarcity, but because of the potential to earn substantially more than what they were earning as day-labourers at the mines, or as gardeners, mechanics, or motorcyclists' (McCullough et al. 2019).

All of these observations undermine the credibility of the scarcity argument, and its variants, and invite scholars to adopt a cautious attitude, and refrain from sensationalistic claims when assessing the possible connections between environmental change, conflict, and migration. Culminating several decades of research, two of the most influential studies in this domain have come to similar conclusions: a prominent article in *Nature* has demonstrated that 'state capacity and socio-economic development generally represent the main causes of conflicts, while climate variability potentially only plays a secondary role' (Mach et al. 2019) (see *Chapter 3, Section 3.3.3*). The latest 6th Assessment Report of the IPCC Working Group II on Impacts, Adaptation and Vulnerability concurrently stresses that 'compared to other socio-economic factors, the influence of climate on conflict is assessed as relatively weak (*high confidence*)' (IPCC 2022).

These considerations should invite scholars to



shift the analytical focus away from rigid climatic determinism and instead pay much greater attention to the key factors that appear to be crucial in processing environmental stressors and making them veer towards either conflict escalation or peaceful settlement — governance, institutions, and adaptation mechanisms.

7.3 Mediterranean challenges: diversity, instability, and the perils of securitisation

Widely recognised as a climate change hotspot, the Mediterranean Basin represents an important, albeit highly complex and variegated, case study to test hypotheses concerning the environment-migration-conflict nexus. Currently host to a number of active or frozen conflicts, the Mediterranean Basin, which is also a major origin and transit region for migration, contains many of the fundamental variables associated with the nexus. At the same time, there is little evidence to support the thesis that climate change has played a direct role in the initiation and recurrence of conflict or migration across Mediterranean Basin states. This holds true retroactively for a wide range and diversity of cases across a large timespan. While much has been written on the role of water scarcity for the advent of the Syrian uprising (see *Chapter 4*), or the role that global food price spikes linked to the fires in Russia and Siberia played in the advent of the so-called Arab Spring in late 2010, such dynamics can at best be considered contributing variables for the onset of such crises. The role of hydrocarbons in the First Gulf War, of water in the Israeli-Palestinian conflict or the Iran-Iraq war of the 1980s, and of desertification or other climate disruptions in the multiple conflicts in the Sahel are also hardly deterministic. At the same time, future trajectories are difficult to predict. It may be possible that under certain trajectories a climate-driven conflict could occur in the Mediterranean Basin, with repercussions in terms of major population displacements.

While few debate the correlation between conflict and migration, with the MENA providing ample evidence for this relationship — for example the Israeli-Palestinian conflict and Palestinian refugee crisis; Iraqi refugee waves following the 2003 US-led intervention; the 2011 Syria war and ensuing refugee crisis; outward migration from Libya to neighbouring states following the 2011 NATO intervention, to name but a few examples — there is little evidence to

support the contention that climate change and/or environmental degradation have played deterministic roles in any past or ongoing conflicts in the region. Instead, they have resulted from a confluence of international and domestic variables, ranging from the recurrence of foreign interventionism since World War I, the legacy of European colonialism, the failures of post-independence Arab developmental models, and the prevalence of authoritarianism and zero-sum geopolitical rivalries (exacerbated by global geopolitical priorities) across Mediterranean Basin states.

A number of challenges specifically linked to the Mediterranean are worth examining when approaching the environment-migration-conflict nexus. These relate in the first instance to the region's broad socio-economic, political, and cultural diversity present. All states across the Mediterranean Basin are exposed to the threats of environmental change (declining precipitation, rising temperatures, soil degradation, and ecosystem disruptions), but their respective capabilities for, and prioritisation of, responses to such phenomena vary significantly across the eastern, northern, and southern shores. While this diversity should not be an impediment to developing environmental impact reduction frameworks, the Mediterranean Basin's political and geostrategic divisions present more of a challenge. Three of the longest-lasting modern conflicts are located in the Mediterranean Basin — the Morocco-Algeria dispute, the Israeli-Palestinian conflict, and the Cyprus dispute — underscoring the geopolitical complexities of the region. These long-lasting conflict divisions have been compounded by many more recent civil and proxy wars that have caused widespread destruction and major migratory waves across much of the region and yet have often also been intertwined with broader international variables. A practical result is that regional cooperation frameworks in the Mediterranean Basin are weak or non-inclusive, thus adding to the fragmentation of the region and the complexity of promoting multilateral frameworks to address common challenges.

The prevalence of conflicts and fragilities across Mediterranean Basin states also translates into varying priorities according to location and proximity. Across and within Mediterranean Basin states, socio-economic, political, and security indicators vary to significant extents (e.g. 'North vs. South',

‘East vs. South’, rural vs. urban, etc.). Capabilities, needs, and sensitivities also change as a result. The threat of environmental change for many struggling societies in the southern and eastern Mediterranean may appear as one among other, often more pressing or deadly, crises and challenges. This makes it particularly challenging to convince states and societies facing profound security crises to dedicate adequate resources and political capital to the task of confronting environmental change. While recent polls in the Arab world have identified climate change — and especially water scarcity — as a key concern of many Arab populations (Abufalgha 2022), the degree to which governing institutions have internalised this priority varies considerably across the region. Iraq, for example, has been recognised by the UN as among the top five countries most at risk of climate collapse, but little has been concretely done to address this threat amidst the multiple security, governance, and economic crises affecting the Iraqi government (UN Iraq 2022; Younis 2022; Alwash 2023).

Turning to the question of migration, it is frequently assumed that human beings are forced to migrate as a practical response to the consequences of environmental degradation and climate hazards (Baldwin et al. 2019). Yet, as with conflict, a systematic theoretical understanding of the role of climate and environmental change on human migration processes has not yet been outlined in the literature (*Chapter 5, Section 5.1.1*). While some cases have confirmed this relationship, especially in the Pacific Island area due to significant sea level rise (see *Ioane Teitiota vs. New Zealand*, UN HCR (2020)), the Mediterranean presents a more complex case. In the southern Mediterranean, there have been cases of migration due to rising temperatures resulting in impacts on land drying, water scarcity, and food security (*Chapter 5, Section 5.2.3*). At the same time, in some Mediterranean Basin states there are examples where environmental migration is currently preferably replaced by a local adaptive response to climate change. As the impacts of climate shocks on migration are non-linear, societies are becoming more resilient to environmental and climate change through adaptation and cooperation strategies. This behaviour is defined as voluntary resistance to climate mobility, where the desire to remain in areas affected by the effects of environmental change is stronger than the necessity to leave (*Chapter 5, Section 5.3.3*). Moreover, migration flows are often

regional or national and rarely reach an international level. Furthermore, most cases registered underline an intensification of urban migration flows, where cities are becoming new climate adaptation hubs (Dalby 2020). This circumstance is due to the fact that long-distance migration routes are expensive, and do not match the economic availability of vulnerable groups already affected by economic, socio-political issues, and possible conflict tensions. This assumption is confirmed by the well-established inverted U-shape association between the availability of wealth resources and migration, whereby migration is found to increase as the overall wealth and prosperity of a country increases, before stabilising after a certain level of prosperity is reached (*Chapter 5, Section 5.1.4*).

Overall, a narrow focus on climate-related disruptions risks overlooking the broader context of pre-existing governance and economic variables, which have a greater bearing on the outbreak of conflict or migration and are also of a higher priority for many states and societies in the southern and eastern Mediterranean.

Fraying governance models, authoritarianism, and declining socio-economic indicators, variables that have already contributed to conflict and insecurity across Mediterranean Basin states over recent decades, cannot be overlooked when examining the possible security implications of environmental change across the area. Ultimately, the very legitimacy and effectiveness of mitigation and adaptation mechanisms aimed at confronting the climate emergency will also rely on a degree of buy-in and consultation with the general public. This implies that transparent governance and social contracts are recognised as indispensable components for effective contingency planning to tackle the climate emergency, as well as possible security-related issues (Dessi et al. 2021; Dessì and Fusco 2022). In this context, the best way to improve the groundwork for confronting climatic and non-climatic disruptions alike is to invest in both state and society via the social contract, functioning and transparent institutions, good governance, and the rule of law (Dessi 2017, 2021). This more nuanced approach also includes an appreciation of how securitised approaches to the nexus in the Mediterranean Basin may in fact be partially driven by other political or security priorities largely concentrated in the Global North. These range from Europe’s emphasis on migration management

via an externalisation of border controls to eastern and southern Mediterranean states, to more general efforts that prioritise stability, countering violent extremism, trade interests, and energy security over political reform, human rights, transparency, or good governance.

An appreciation of these legacies and the potential for ingrained biases are indispensable for contextualising the trajectories of state fragility in parts of the Mediterranean Basin, as well as the impact that state policies and consumption models in the Global North have had on these trajectories. Rebuilding trust and interdependencies via structured and equal dialogue — between the northern, southern, and eastern shores of the Mediterranean, but also within single states and specific shores — is no simple feat. It will likely require a higher degree of burden-sharing by the Global North compared to southern and eastern Mediterranean states, as indeed is being called for by Egypt and the United Arab Emirates (UAE), hosts of the UNFCCC COP 27 and COP 28 conferences in 2022 and 2023, respectively. Such dialogue can be strengthened by co-dependencies and the promise of enhanced and mutually beneficial integrations across and within Mediterranean Basin states but will necessarily also need to respond to the actual priorities of states and societies in this space. The parallel promotion of legal migration pathways as well as increased technical and developmental assistance and support for civil society, human rights, and the rule of law would help respond to some of the societal grievances emanating from southern and eastern Basin states. Concepts such as ‘just transition’, burden-sharing, and environmental peace (see *Chapter 4*, and particularly *Section 4.6*) could go some way towards addressing these challenges and seeking more balanced interactions across Mediterranean Basin states. Such approaches can provide new impetus and groundwork for relaunching more genuine forms of Euro-Mediterranean cooperation based on mutually beneficial frameworks of integration and co-dependency, thereby reviving some of the original objectives of the Barcelona Process launched in 1995. If successful, such efforts would significantly improve the region’s coping capacities in the face of the climate emergency. Improvements in these political, security, and governance domains would increase room for more sectoral climate-related interventions. This includes efforts that generally require a degree of government legitimacy and societal buy-in to achieve results, but

more broadly also require a transnational dimension of inter-state cooperation and interdependence to be sustainable in the long term. In this regard, rebuilding trust across the Mediterranean and renewing genuine political and diplomatic efforts to resolve key outstanding conflicts in the region would also go some way towards increasing the regional capabilities of states and societies to entertain joint efforts to better enhance regional resilience to the climate emergency.

There is no disputing that climate change will exacerbate fragilities for states and societies across all shores of the Mediterranean Basin. What is required is a deeper appreciation of the broad diversity affecting the Mediterranean space, as well as the complex ways environmental change is affecting a whole range of pre-existing fragilities in the socio-economic, political, and governance domains that are the most direct drivers for conflict or migration in the region. In this sense, developing context-specific and tailored engagements capable of addressing both climate and non-climatic dimensions simultaneously in a specific country or sub-regional grouping of countries is required. Such efforts should be driven by a focus on human security, the social contract, and governance indicators within single states. Simultaneously, the promotion of enhanced forms of interdependence and integration for the management of increasingly scarce resources in a region that still suffers from the lowest levels of integration in the world (Malpass 2021; OECD 2021) should be pursued across the Mediterranean. In this context, it may be preferable to prioritise sectoral cooperation frameworks among specific sub-groupings of states, instead of broad one-size-fits all prescriptions applied to the whole Basin. Finding ways to improve the coping capacities and resilience of groups of states — through enhanced forms of infrastructure connectivity, burden-sharing, and integration — as a means to encourage regional de-escalation and détente, should be considered an effective policy approach to tackle the environmental risks associated with the nexus in the Mediterranean Basin.

The importance of strengthening cooperative governance arrangements has also been emphasised in the literature. As Scheffran (2021) notes: ‘Cooperative platforms, interagency frameworks, and multi-institutional processes are beneficial for bridging diverse interests across the region

and establishing rapid response mechanisms. Climate diplomacy practices are implemented by a broad range of actors, including national and local governments involved in policymaking, international organisations, such as the UN and the EU, NGOs, and donor funding projects. Regional partnerships and initiatives can connect global and local actions, jointly address climate-fragility risks, and improve resilience, engaging with existing networks, fora, and conferences'. Multilateral dialogues providing frameworks for climate diplomacy already coexist at different levels (EEAS, NATO, OSCE) but with little interaction amongst them. More improvement and the exploitation of synergies is therefore necessary, as is the breaking down of policy silos across and within these organisations. Such multilateral efforts could also include key powers external to the Mediterranean (China, Iran, Saudi Arabia, the Russian Federation, and the United States of America) to identify cooperative pathways in North-South or South-South frameworks (Ehteshami and Horesh 2019).

A final important caveat concerns temporality. While existing literature and current climate conditions have not yet demonstrated significant and direct correlations between environmental change, conflict, and migration, future scenarios may change this outlook. In light of the worsening trajectory of climate change model projections, and the prevalence of political fragilities across many parts of the Mediterranean Basin, more direct correlations could emerge in the future. Several studies have delineated scenarios in which global temperature increases of 2.7°C, 3.6°C, and 4°C could lead to future conflict or migration waves (see *Chapter 4*, and particularly *Section 4.3*), given their significant impact on states and societies in the region. Such prospective climatic scenarios represent the prevailing motivation to promote new research by academia, policymakers, and the scientific community on the environment-conflict-migration nexus. While these scenarios are important to pursue and consider, maintaining a strong focus on governance and political variables remains essential, as they are highly crucial for strengthening the capacity of states and societies to mitigate climate-related threats, while at the same time containing their non-climatic, conflict, or migration-related implications.



7.4 Methodological issues

The environmental change-migration-conflict nexus has been studied in different fields using different methodologies. Researchers follow a methodology based on several parameters, such as the research objectives, the type and availability of data required, the accessibility of resources and participants, ethical considerations, and the desired level of depth and breadth of analysis. However, some issues are to be noted regarding these parameters. In their study, Hoffmann et al. (2021) identify five methodological challenges: correct measurement of climate migration, conceptualisation and representation of climatic events and hazards, integration and aggregation of data, causality identification and modelling, and understanding the effects of diverse mechanisms and contexts. It is important to note that out of the 127 studies Hoffmann et al. take into consideration, only twelve studies focus on Mediterranean countries. While eight of these are in Africa, the others use units of analysis such as the 'developing world', non-OECD countries, and MENA countries.

An approach more focused on Mediterranean countries reveals various methodological challenges, which are discussed below, along with relevant suggestions for addressing them.

7.4.1 Interdisciplinary and multidimensional research

Addressing the complex challenges of environmental change, conflict, and migration requires taking a multidimensional approach that considers social, economic, and political factors. This includes seeking sustainable development practices that reduce vulnerability to environmental climate change by addressing its root causes, while paying attention to protecting human rights, ensuring the safety of migrants and refugees, and strengthening international cooperation and governance. Not only climate mobility, but in some cases, climate immobility, may also be linked to conflict. In this context, there is a pressing need for further research into the political, historical, economic, sociological, and psychological dimensions of persistent fragilities in the Basin. It is imperative to pay meticulous attention to the enduring impacts of colonialism, foreign interventionism, and the economies of war.

This raises the theme of interdisciplinary research. Just as Disaster Risk Reduction (DRR) studies have gained importance in disasters caused by the sudden onset effects of environmental change, a similar necessity applies to slow onset effects. Since the effects of these events unfold gradually, efforts focus on investigating the causes, consequences, and processes over a long period. Only then can the steps needed for adaptation and resilience be identified. However, there are cases where the environmental stressors on communities can be managed without resulting in conflict and migration. Local cooperation mechanisms that enable the exchange of knowledge and experience between these good practice examples and vulnerable regions can be a functional method that serves as Conflict Risk Reduction (CRR) (Collins 2019). This approach operates on the principle of interoperability, which entails the ability to share information and capacities between various actors. By doing so, the focus can be shifted from the environment-migration-conflict nexus to the environment-mobility-stability nexus.

7.4.2 Contextual complexities: multiple historical, regional, and cultural contexts and individual stories

The Mediterranean region is characterised by diverse cultures, histories, and political systems. This can make it difficult to draw generalisable conclusions about the relationship between environmental change, migration, and conflict, as different contexts may require different approaches and methods of analysis. Another important issue is the superficial view that can lead to environmental pressure, migration, and conflict being seen and approached as entirely new phenomena in the relevant region. In other words, researchers who focus on the migration and conflict risk nexus in the context of environmental change may analyse existing cases by dissecting them as outsiders, separating them from their socio-political basis, and potentially ignoring their own positionality. An effort to understand how anthropogenic climate change affects and transforms the existing dynamics of migration, conflict, environmental degradation, and disaster culture in the relevant geography is important for producing scientific knowledge associated with this nexus.

Another factor that increases the complexities in the region is the EU's security-oriented approach

to migration through ‘governing from a distance’ (Geddes 2015, p.475). This approach is reflected in the EU’s efforts to promote adaptation and build resilience in the region. However, the recent data showing that environmental change-related mobility is mostly internal or directed towards neighbouring countries may adversely affect the distribution of international climate change adaptation financing in these regions. In this respect, it is important that the primary motivation for supporting climate change adaptation and resilience efforts in the Mediterranean Basin is not limited to migration towards Europe across the Mediterranean Sea, but also aims at achieving global climate justice.

Moreover, efforts also need to focus on adopting effective policies and methods to minimise the effects of climate change and environmental degradation, particularly through the restoration of lands and ecosystems (Fargues et al. 2020). In this regard, studies highlight the importance of focusing primarily on populations at risk of being trapped by the climate crisis (Black et al. 2011; Geddes et al. 2012), rather than only considering them as potential involuntary migrants once conflicts arise. Otherwise, security-driven approaches to migration might gain more popularity, leaving many to move via irregular channels as the only alternative for survival if large-scale initiatives on migration, development, and the environment fail to achieve their goals (Fargues et al. 2020) and fail to prioritise climate justice. This difficulty calls for embracing plural ontologies of security (Dedeoğlu 2019). In addressing the complex security context, ontological plurality can be sustained by incorporating post-humanist, post-colonial, queer, and indigenous philosophies that pay attention to more-than-human entanglements and argue for critical engagements with the different forms and politics of matter.

For a more complete picture of these mechanisms and pathways, researchers also need to pay attention to a diversity of dynamics. While the environment-migration-conflict nexus is mainly discussed in the context of race, ethnicity, religious groups, and local communities, the context of social class and gender is less explored (for example see Hunter et al. 2015; Miletto et al. 2017). More in-depth and intersectional research is needed in this area — a top-down approach focusing on states, governing elites, the private sector, etc. is still dominant, overlooking local communities or specific sub-groups like

gender-based, ethnic, or other minorities. The recommendation in this case would be to also have more bottom-up or horizontal research on techniques and local capabilities/strategies.

Another problem is the lack of attention to small-scale mobility and the greater focus on large-scale or mass migrations, because the cumulative effect of small-scale environmental migrations — which occur more frequently than in the past due to environmental change — may be one of the basic grounds that prepare the emergence of conflicts. Greater attention to small-scale climate mobility could therefore serve as CRR.

7.4.3 From environmental conflict to environmental justice?

The question, ‘How can the relationship between environmental change, migration, and conflicts be measured?’ is central to understanding climate-related mobility. It is equally important to ask: what is actually being measured? How can migratory experiences be better understood? What does conflict refer to? For instance, conflict has recently gained prominence in the context of the impact of slow onset effects on climate mobility. Rising incidents of violence, particularly in sudden onset displacement, are significant concerns in both rural origin areas and urban destinations. However, the effect of environmental mobility on the increase in violence in camps and remain insufficiently examined.

Anthropological and ethnographic research may help address these questions by offering a more nuanced understanding of migratory experiences, integrating insights from both migration and mobility studies. Ethnography, with its focus on the lived experiences of individuals and communities, provides a powerful tool for capturing the complex realities of migration in a globalised world (Heil et al. 2017). An interdisciplinary framework, as proposed by Brettell and Hollifield (2022), that encompasses a wide range of research questions, levels of analysis, and methodologies is also needed for the nexus of environmental change and mobility. This framework stresses the need for dialogue across disciplines to share theoretical perspectives and analytical concepts, challenging core assumptions and aiming to foster a more unified field of migration studies. It can be used to address the complexities of migration, including its causes, processes, and

effects on individuals, families, communities, and societies, while also considering the legal, political, and economic dimensions of migration policies and practices, before framing it as a source of conflict. Furthermore, the bibliography database curated as part of the CliMig project⁸⁴ may support the development of such interdisciplinary perspectives.

In addition, the Transhumance Tracking Tool (used by Displacement Tracking Matrix missions in west and central Africa) provides for a more in-depth examination of the environmental and social effects of migration and, through an alert mechanism, can assist in identifying possible and actual conflicts (Nicoletti et al. 2023). However, 'transhumance movements' and 'climate mobility as a form of adaptation' are two separate phenomena with different dynamics, and trying to make sense of the latter by deriving from the former may cause misleading inferences. The transhumance movement is a custom that spans a much longer period of time and even continues as a part of the relevant culture. Both the cultural values of the community and the social system in which they are integrated have been shaped accordingly. However, climate mobility as a result of gradual effects or sudden onset effects, to which members of the settled agricultural society are exposed, needs to be evaluated in a different context. Although it is very useful to examine these migration movements in order to prevent and mediate potential conflicts, it should be noted that while reading the data obtained here, transhumance mobility exhibits a very different structure-agent relationship.

Another question to consider is whether to take environmental conflicts into account, and how methodologies should be updated. Should environmental conflicts be viewed from the perspective of scarcity? What alternatives emerge? Climate change is primarily caused by human activities such as burning fossil fuels, deforestation, and industrial processes, therefore representing an anthropogenic phenomenon. These same activities often lead to other environmental conflicts, such as mineral extraction, pollution, loss of biodiversity, and resource depletion. Addressing environmental change therefore requires a fundamental shift in how we understand and approach conflict. It entails

fundamental conceptual reconsideration and involves rethinking the economic assumptions behind these conceptualisations, based on the recent updates to the planetary boundaries approach (Richardson et al. 2023). This means moving beyond business-as-usual practices that exploit natural resources and human labour, often to the detriment of public interests, particularly in the context of interactions between the Global North and the Global South. It also requires recognising the interconnectedness of environmental issues and understanding that addressing climate change is not only important for reducing its impacts but also for promoting environmental justice and preventing further conflict. In this respect, it is crucial to incorporate environmental justice research on the rights of non-humans and commons into the study of the environmental change-conflict-migration nexus.

7.4.4 Data availability and reliability

Another area of concern is data availability and reliability. The use of household surveys, combined with key informant interviews and secondary data, can offer insights into the factors influencing mobility decisions and the vulnerability of populations, including migrants. While data collection tools in humanitarian contexts have focused on mobility associated with environmental and climate changes and disasters, they have not adequately considered environmental determinants and their interactions with other factors that may shape mobility decisions, and adaptation outcomes (Nicoletti et al. 2023). New tools, such as the Displacement Tracking Matrix and the Transhumance Tracking Tool, can be used to respond to these challenges and provide more timely data on movements and outcomes. However, as noted by Nicoletti et al. (2023), these tools may hinder a rapid response to urgent needs. The authors recommend a balanced approach and suggest that more effort should be made to finance and deploy joint longitudinal approaches, focus on 'blind spots' and internal mobility, and include populations that do not move to shed light on issues of immobility. These recommended actions will help stakeholders better understand why people move, facilitate return migration, and reduce future out-migration.

⁸⁴ <https://environmentalmigration.iom.int/climig>

One of the main reasons for insufficient data on whether environmental migrations cause conflicts is the data gaps on disaster-related internal displacement in national databases of Mediterranean countries. There is not enough data on the contribution or role of governments and local authorities' success or failure in adequately tackling environmental change, implementing necessary measures, or misallocating resources that may influence the occurrence or escalation of conflicts between communities. For example, the International Organization for Migration (IOM 2016) has noted that despite Morocco's concerns about environmentally induced mobility, no comprehensive study or analysis of environmental migration has been conducted in the country. Additionally, while the Moroccan government recognises that droughts can impact vulnerability and migration, no research has been conducted on internal migration induced by environmental factors (see *Section 5.2.1* for details).

The principle of interoperability can also be very helpful in overcoming some biases and blind spots that may arise in the data collection process. Unlike slow onset events such as drought, in sudden onset events like tornadoes, there tends to be a lower involvement of national and local actors in the data collection process. In such scenarios, international institutions and organisations may collect data in the region, and sometimes that is even the preferred option. This would have the advantage of preventing the emergence of trust issues with national data. On the other hand, in the case of slow onset events, a more sceptical approach toward national and local data may be necessary, due to the intertwining of economic and related political factors with environmental factors and diminishing resources. Of course, this does not mean that the path to unbiased data lies solely through independent international organisations. Data biases cannot solely be addressed through the perspective of an international observer due to the complexities of localities and the multi-layered and multidimensional relationships surrounding them. Because of all these dimensions, collaboration and coordination between local organisations, international organisations, and researchers with diverse disciplinary backgrounds, as mentioned in *Section 7.4.3*, are crucial for understanding and analysing local climate dynamics and conflict relationships.

7.4.5 Diverse methodologies and longitudinal and comparative studies

Climate mobility is a phenomenon formed by the intricate relationship of many different factors. When conflict is associated, the mixed-methods research becomes even more important. It is crucial to determine which factors play a role in the formation of mobility and to what extent, to understand how these factors interact with each other and what processes they create, and finally to analyse both quantitative and qualitative data to gain a deeper understanding. This approach is undoubtedly an effort that requires substantial resources.

Singh et al. (2019) have already documented the rich spectrum of methodologies used in climate change vulnerability and adaptation (CCVA) research with respect to environmental migration, which can be implemented by scholars looking at the nexus with a specific focus on the Mediterranean Basin. Environmental migration is explored through various methods such as spatial and multi-scalar analyses, historical analogues, a hotspots approach using vulnerability indices, and qualitative field case studies using ethnographic methods (Piguet 2010). The scholarship on environmental migration conceptualises livelihoods as dynamic and multi-scalar, where agency and structure interact and exert feedback on one another. This has led to a methodological expansion where issues of identity, history, culture, and values are being examined more rigorously through qualitative methods focusing on temporality and migration decision-making. However, there are several gaps in the literature too. More research is needed on how drivers of vulnerability interact to shape household response behaviour, and how barriers to adaptation interact and shape responses. While there is some research on factors shaping adaptation, there is a lack of understanding of individual decision-making. Growing calls are being made for understanding the role of intra-household dynamics in mediating risk management choices and their outcomes. CCVA research has also been criticised for its silence on temporality and over-reliance on static methodologies, which do not capture complex structural conditions. Additionally, changing aspirations are rarely examined in adaptation research and practice, and there is a need to understand how shifting aspirations mediate adaptation behaviour.

7.5 Conclusion: rethinking the environment-migration-conflict nexus

This report assesses the available academic literature to shed light on the environment-migration-conflict nexus in relation to the Mediterranean Basin. This work has yielded considerable insight into a growing body of literature, which is allowing certain aspects of the nexus to come into greater focus. For example, the report provides an overview of the strong evidence that supports the existence of causal links between conflict and migration, while less clarity and linkages are demonstrated regarding environmental change and conflict. This proven relationship between conflict and migration is related to the flow of IDPs and refugees that accompany conflict events. The literature has shown that this relationship is of a distinctive cyclical nature: rising violent conflict swells the number of people on the move; the resolution of conflict then reduces this number, as the vast majority of those who fled tend to return to their residences. Within the nexus, then, the causal link that remains largely unproven is the one between environmental change and conflict.

This is an important dimension of the nexus, which has been explored by an increasing number of investigators since the early 2000s on the assumption that the physical effects of environmental change would increase the risk of violent conflict among individuals, communities and nations. Yet, the evidence remains inconclusive, and no direct causal link between climate change and conflict has been proven in the literature.

Currently, the main conceptual framework for understanding the nexus has been that environmental change is seen as a 'threat multiplier'. This multiplying factor, while not directly linked to conflict, is understood to increase cleavages and tensions between individuals, groups, and nations, particularly those that are already struggling to find ways to collaborate in the management of natural resources and in defining collective security, and thus to contribute to the risk of violent conflict. As noted above, the validity of the 'threat multiplier' framework has, to date, been neither confirmed nor refuted. The framework has focused almost entirely on the effects of climate change on security and, more specifically, national security (i.e. hard security). It has also tended to focus on the role of national institutions in countries already affected by conflict

or fragilities, suggesting that where these institutions are weak or fragile, the risk of further conflict would naturally be higher. While a number of 'pathways' have been analysed above, whereby environmental change is presumed to lead to conflict or migration via the 'scarcity' mechanism (and its variations), these, too, remain inconclusive with regards to the Mediterranean Basin. Overall, while the 'threat multiplier' framework is beneficial to widen the scope of the focus away from climate-related variables alone, the broad adoption of this framework has also removed incentives for multidisciplinary approaches to the study of the environment-conflict-migration nexus. Indeed, 'threat multiplier' frameworks have focused mainly on security and security studies as the key determinant for the behaviour of individuals, communities, and nations in response to climate change. An overbearing focus on security has, however, left other potentially determining factors underexplored, including some particularly salient ones in relation to the study of conflict and peace, for example justice and economics. Moreover, the 'threat multiplier' framework has also largely ignored the role of institutions in developed (or Global North) nations, and that of intergovernmental organisations. These institutions and organisations should also be considered important variables for explaining the occurrence (or non-occurrence) of violent conflict, as well as the emergence of environmental change in the first place, in light of the destabilising impact of lifestyles in the Global North. The primary impetus behind endorsing initiatives geared towards environmental change adaptation and resilience in the Mediterranean and the MENA region extends beyond simply understanding migration towards Europe via the Mediterranean Sea. Instead, a broader perspective centred on global climate justice may offer a more comprehensive approach. This shows that the focus, often limited to preventing migration, should also encompass the broader objective of addressing the inequities and injustices arising from environmental change on a global scale.

In this regard, a better understanding of the complex causal links between the environment-conflict-migration nexus will require a reframing of the nexus in a more holistic fashion, underscoring the climate emergency's direct and detrimental impact on human security (and planetary security) as opposed to the prevalent, albeit rather recent, hard security emphasis common in policy circles. The concept of human security might represent a better and more

holistic analytical concept for understanding how the phenomena of environmental change, migration, and conflict interact. Human security is ‘an approach to assist Member states in identifying and addressing widespread and cross-cutting challenges to the survival, livelihood, and dignity of their people’ through ‘people-centred, comprehensive, context-specific, and prevention-oriented responses that strengthen the protection and empowerment of all people’ (UN General Assembly 2012). In this regard, human security-centred policies mirror the recent emphasis by the UN and other INGOs on a ‘whole society’ approach, linked as well to the implementation of the UN’s Agenda 2030 and associated Sustainable Development Goals (SDGs). Human security draws attention to socio-economic hardships and inequalities, which, in general terms, climate and environmental change are known to exacerbate (Taconet et al. 2020; Dessì and Fusco 2022; Figueres 2022). Human security also integrates the discourse around human rights and governance and can therefore account for factors related to a country’s treatment of its own citizens — whether virtuous or not. The reviewed literature suggests these considerations are a strong determinant for understanding where and how environmental change might exacerbate conflict and migration. Ultimately, a human security-centred approach will require equal emphasis on climatic and non-climatic challenges facing states and societies in the Mediterranean Basin, seeking policy prescriptions capable of having a positive impact on both domains. Seeking to tackle one domain — climate disruptions and their potential impact on conflict and migration — without a simultaneous emphasis on good governance, human rights, the rule of law, and transparent and legitimate institutions will prove unsatisfactory. It is also likely to be counterproductive, as challenges with governance are likely to carry over and negatively impact the effectiveness and buy-in of mitigation and adaptation mechanisms promoted to tackle the climate emergency.

Beyond human security, it would be valuable to allocate more resources to exploring instances of environmental cooperation, which, as the report duly notes, exist across the Mediterranean Basin. The cases cited in the report (*Chapter 4*) suggest that stressors like migration and climate change may indeed serve as an opportunity for collaboration and conflict resolution — as much as they might represent a risk multiplier for violent conflict. Several possible

explanations, including the political system of a country or the inclusiveness of its decision-making processes, all of which would receive scant attention under an approach strictly focused on hard security, can influence conflict or cooperation trajectories between states and societies on these issues. Furthermore, investigating cases of cooperation might create a helpful counterweight to the oft-cited cases supporting the view that environmental change exacerbates conflict. A greater variety of cases in the literature could provide valuable insights.

As already mentioned, there are few studies specific to the Mediterranean Basin, certainly when compared with similar literature for Sub-Saharan Africa. Increased variety in the geographical distribution of case studies would provide clear benefits to the understanding and testing of the nexus in this geographic region. The same goes for increased variety in methodologies and conceptual frameworks to be used for investigating identified case studies.

Returning to the prevalence of securitised approaches applied to the present environmental emergency, it is similarly important to appreciate the reasons behind these frameworks and the prioritisation of national and hard security. The current securitisation trend in international approaches to the climate-migration-conflict nexus is indeed part and parcel of the broader process of framing climate change as a security issue (securitisation) in developmental studies underway since the terrorist attacks of 11 September 2001.

While this shift may have generated useful outcomes in terms of urgency and allocation of budgetary resources, an over-reliance on a single conceptual framework should not detract from others that also account for deeper sociological, economic, political, and even anthropological or historical research lenses.

These may hold value in identifying alternative pathways for enhancing joint ownership and local capabilities to implement needed adaptation and mitigation strategies that build on local traditions and experiences. To help achieve this, future inquiries need to be more multidisciplinary, integrating economic theories and analysis frameworks that focus on understanding (and predicting) the management of common goods and the distribution of resources. Political economy analyses (PEA) have, in particular, become a commonly-used approach for successfully

understanding resource allocation and growing inequalities, offering valuable insights into why and how nations — on both sides of the Mediterranean — engage in the economic (and political) effort that can exacerbate conflict and climate change. On the more extreme spectrum of multidisciplinary is the concept of ‘environmental peacebuilding’, which seeks to include ‘natural resource management in conflict prevention, mitigation, resolution, and recovery to build resilience in communities affected by conflict’ (Environmental Peacebuilding Association®, also known as EnPAx®⁸⁵). Environmental peacebuilding has emerged over the past five years to improve understanding of the linkages between environmental change and conflict. It integrates the concepts of natural resources management and peacebuilding, while also shifting the unit of analysis to the local level — where individuals and communities need to make localised decisions to remain resilient in the face of both phenomena.

Ultimately, this report provides ample insights into the primary methodological and policy challenges linked to understanding the determinants and implications of the environment-conflict-migration nexus in the Mediterranean Basin. Widely recognised as a climate change hotspot, the Mediterranean Basin is well placed to serve as a test case for present and future determinants across the nexus. That said, the broad diversity of the region, combined with the deep legacies of geopolitical conflict and divisions within and across its northern, southern, and eastern shores, represent the primary challenges for the adoption of multilateral frameworks based on genuine cooperation, interdependence, and burden-sharing (or interdependency) across Mediterranean states and societies.

The different levels of prioritisation of the environmental emergency, and the prevalence of authoritarianism across the southern and eastern Mediterranean, where societies are often confronted with a mixture of pressing, even existential hardships, also represents a challenge. Meanwhile, the emphasis on migration management, energy security, and anti-terrorism among European states and extra-regional actors all point to a mismatch in expectations and policy priorities across the Basin. This creates

significant impediments to the promotion of region-wide prescriptions to test and tackle the environment-conflict-migration nexus in the Mediterranean Basin.

Building on the above, this chapter has emphasised the need to broaden the scope of data collection and analysis, embrace more multidisciplinary approaches, and question the prevalent security framework applied to the nexus in the literature. In emphasising ‘whole society’ approaches centred on human security, the analysis has underscored the need to simultaneously consider climatic and non-climatic variables when considering the nexus in the Mediterranean. While the report has repeatedly emphasised the lack of a direct causal relationship between environmental change and conflict/migration in the Mediterranean, this lack of correlation does not imply a decreased probability of such phenomena taking place in the future. In light of the considerably worsening outlook in the global fight against climate change and environmental degradation, and the consequent modelling for future climatic events in the Mediterranean, it may well be that more direct correlations emerge in the future.

Given the severe fragility of many states and societies across the Mediterranean Basin today, a deep sense of urgency is called for when devising policies and predictive modelling for this region over the coming decades. Against this backdrop, the key methodological and policy takeaway from our analysis is not to overlook governance, the rule of law, and human rights — in a nutshell the essence of politics and the social contract — when seeking to devise strategies to tackle the environment-conflict-migration nexus. Strengthening good governance, transparency, and accountability, while acknowledging the role of historical dependencies and power asymmetries, represents the best investment to enhance the coping capacities and resilience of states and societies in the Mediterranean. Ultimately, it will be these institutional capacities and mechanisms that will determine a given state’s and society’s ability to mitigate and adapt to the changing environment, whether this is determined by rising sea levels, resource scarcity, and temperature increases, or other phenomena linked to governance breakdown, armed conflict, or migratory flows.

⁸⁵ <https://www.enpax.org/about>

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Knowledge gaps and strategies to address them

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